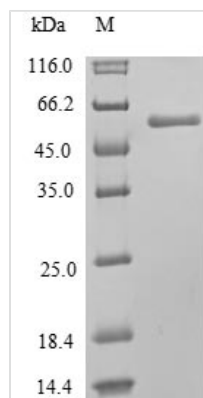




Recombinant Human Mixed lineage kinase domain-like protein (MLKL)

Product Code	CSB-EP850851HUa0
Relevance	Pseudokinase that plays a key role in TNF-induced necroptosis, a programmed cell death process. Activated following phosphorylation by RIPK3, leading to homotrimerization, localization to the plasma membrane and execution of programmed necrosis characterized by calcium influx and plasma membrane damage. Does not have protein kinase activity.
Abbreviation	Recombinant Human MLKL protein
Storage	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.
Uniprot No.	Q8NB16
Product Type	Recombinant Protein
Immunogen Species	Homo sapiens (Human)
Purity	Greater than 85% as determined by SDS-PAGE.
Sequence	MENLKHIIITLGQVIHKRCEEMKYCKKQCRRRLGHRVLGLIKPLEMLQDQGKRSV PSEKLTAMNRFKAAL EEANGEIEKFSNRSNICRFLTASQDKILFKDVNRKLSD VWKELSLLLQVEQRMPVSPISQGASWAQEDQQDAEDRRAFQMLRRDNEKI EASLRRLEINMKEIKETLRQYLPPKCMQEIPQEIQEIKKEQLSGSPWILLRENE VSTLYKGEYHRAPVAIKVFKKLQAGSIAIVRQTFNKEIKTMKKFESPNILRIFGICI DETVTPPQFSIVMEYCELGTLRELLDREKDLTLGKRMVLVLGAARGLYRLHHS EAPELHGKIRSSNFLVTQGYQVKLAGFELRKTQTSM SLGTTREKTD RVKSTAY LSPQELEDVFYQYDVKSEIYSFGIVLWEIATGDIPFQGCNSEKIRKLVAVKRQQ EPLGEDCPSELREIIDECRAHDPSVRPSVDEILKKLSTFSK
Research Area	Signal Transduction
Source	E.coli
Target Names	MLKL
Expression Region	1-471aa
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	N-terminal 6xHis-tagged
Mol. Weight	58.5 kDa
Protein Length	Full Length
Image	



(Tris-Glycine gel) Discontinuous SDS-PAGE (reduced) with 5% enrichment gel and 15% separation gel.

Description

The full-length cDNA ORF of Human Mixed lineage kinase domain-like protein (MLKL) was N-terminally tagged a 6xHis and then expressed in E.coli. The Recombinant Human MLKL obtained got over 85% of purity determined by SDS-PAGE. Under reducing conditions, the MLKL protein migrated to an approximately 59 kDa molecular mass band on the gel. And stored MLKL proteins are offered. This recombinant MLKL protein may find uses in the specific antibody synthesis or the studies of MLKL-related signal transduction.

MLKL is the terminal executor of necroptosis. In addition to the necroptotic function, MLKL is also involved in diverse biological processes. It controls the degradation of the myelin sheath, subsequently facilitating nerve regeneration. Studies have shown that MLKL controls NLRP3 inflammasome formation and IL-1 β release in macrophages upon TLR activation. Moreover, MLKL is also involved in the maintenance of the integrity of cellular membrane, the promotion of cell survival, the regulation of the expression of endothelial adhesion molecules, the control endothelial cell (EC)-leukocyte interaction in vitro and in vivo.

Reconstitution

We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL. We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.

Shelf Life

The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.